ENERGY FACILITY SITE EVALUATION COUNCIL
STATE OF WASHINGTON

IN THE MATTER OF APPLICATION NO. 96-1 OLYMPIC PIPE LINE COMPANY CROSS CASCADE PIPE LINE PROJECT	APPLICATION NO. 96-1 PREFILED TESTIMONY OF CHARLES T. LUTTRELL EXHIBIT _____ (CTL-T) **ISSUE**: ARCHAEOLOGICAL AND HISTORICAL RESOURCES ON OR NEAR STATE PARK LANDS **SPONSOR**: WASHINGTON STATE PARKS AND RECREATION COMMISSION

Q. Please provide your name and business address to the Council?

A. My name is Charles T. Luttrell. I am employed as an archaeologist by Archaeological and Historical Services (AHS) at Eastern Washington University, 526 Fifth Street, Mail Stop 168, Cheney, Washington 99004.

Q. Please summarize your educational background and employment history?

A. I hold a Bachelor of Arts degree in Anthropology (1989) and a Bachelor of Fine Arts degree in Studio Arts (1987) from Eastern Washington University. In addition, I have completed the course requirements for a Master of Arts degree in History at Eastern Washington University. I am currently writing my thesis for completion of this Masters degree. Areas of expertise include western ethnology, American architecture, and historic preservation, as well as historic-period irrigation, mining, and railroad development. My employment as a full-time archaeologist at AHS began in 1989. Since that time, I have

participated in numerous cultural resources projects related to prehistoric archaeology and history, including authoring a wide variety of technical reports.

Q. Generally, what is the subject of your testimony?

A. My testimony concerns the potential impacts of the proposed Cross Cascade Pipeline on recorded and presently unknown archaeological and historical resources that may exist within or in proximity to the proposed pipeline route on Washington State Parks and Recreation Commission (WSP&RC) lands, including the Iron Horse State Park/John Wayne Pioneer Trail, Twin Falls State Park, and Gingko Petrified Forest State Park.

Q. Are you familiar with the archaeological and historical resources within Iron Horse State Park/John Wayne Pioneer Trail, Twin Falls State Park, and Gingko Petrified Forest State Park?

A. Yes, from 1989 to the present I have participated in archaeological surveys and test excavations, and background research concerning archaeological and historical resources situated in proximity to the Iron Horse State Park/John Wayne Pioneer Trail. Most recently, I was the primary author of an overview of the prehistory, history, known cultural resources, and record of past archaeological investigations undertaken to date on lands in and near the Iron Horse State Park/John Wayne Pioneer Trail. My knowledge of resources within Twin Falls State Park and Gingko Petrified Forest State Park is based on recent conversations with Mr. Daniel Meatte, Archaeologist for the WSP&RC and review of technical reports relating to archaeological studies in the Vantage area.

Q. Are you familiar with the proposal by the applicant to this proceeding, the Olympic Pipe Line Company, to construct a petroleum pipeline on portions of the Iron Horse State Park/John Wayne Pioneer Trail, Twin Falls State Park, and Gingko Petrified Forest State Park?

A. Yes, I have reviewed pertinent documentation including Olympic Pipe Line Company's revised application to the Energy Facility Site Evaluation Council (EFSEC) for site

certification, the Draft Environmental Impact Statement (DEIS) for the proposed Cross Cascade Pipeline, and the technical report entitled *Results of A Cultural Resources Assessment for the Olympic Pipe Line Company's Proposed Cross Cascades Petroleum Products Pipeline, Washington,* by Historical Research Associates (HRA), Inc., and Dames & Moore.

Q. Will any archaeological and historical resources located on the John Wayne Pioneer Trail or in Twin Falls or Gingko Petrified Forest State Parks be potentially affected by the construction of the proposed Cross Cascade Pipeline?

A. With the exception of Milwaukee Road bridges, Humpback Mountain Snowshed, and the Snoqualmie Tunnel, no previously recorded cultural resources are located on the trail surface of the John Wayne Pioneer Trail. However, numerous sites are situated immediately adjacent to the trail or within 50 feet of the railbed centerline. It is noted that the John Wayne Pioneer Trail is primarily configured as the former railbed of the Milwaukee Road's Coast Division through portions of Kittitas and King counties. As such, it represents a narrow corridor within the larger confines of Iron Horse State Park. In most locations, Iron Horse State Park is a 100-foot-wide area that conforms to the Milwaukee Road's former right-of-way (ROW); however, the park does expand to wider areas in select locales such as at the locations of historic-period railroad stations.

Information concerning those cultural resource sites that are closest to the trail and whose location coincides with legal descriptions for the proposed Cross Cascade Pipeline segments is summarized at the conclusion of this testimony in **Table 1**. Information listed in **Table 1** has been drawn from a variety of sources, including site file information and cultural resources reports on file at the Washington State Office of Archaeology and Historic Preservation (OAHP), Lacey; project materials on file at the Eastern Washington University office of AHS, Cheney; information provided by the WSP&RC, Olympia; and

cultural resources site data obtained from the US Forest Service, Wenatchee National Forest.

Data compiled in **Table 1** is organized by Cross Cascade Pipeline segment number and by legal location (e.g., Township [T], Range [R], Section [S]) within each pipeline segment. Each pipeline segment's legal location(s) that was submitted to AHS for cultural resource evaluations is included in **Table 1**. In cases where no cultural resource sites were known or suspected in a given legal location, corresponding data fields have been left blank to indicate the lack of resources. If more than one cultural resources site was situated within the same section of a particular township, then each site was addressed individually with its own set of data fields within that legal location. To more precisely locate cultural resource sites, Universal Transverse Mercator (UTM) grid numbers have also been provided when such information was readily available.

Of the numerous cultural resources sites situated on or near the Iron Horse State Park/John Wayne Pioneer Trail, and that coincide with the proposed Cross Cascade Pipeline segments, only three of these are associated with the prehistoric period. This small grouping includes sites 45KT316, 45KT835, and 45KT836, all of which are located along the west bank of Lake Keechelus. Sites 45KT316 and 45KT836 appear to be potentially eligible for inclusion in the National Register of Historic Places (NRHP). The assessment of potential eligibility is based on the results of test excavations completed at 45KT316 and 45KT836 in the early 1990s and reported in the draft *Report on the Phase II Testing on Puget Power's Hyak-Wanapum Electrical Transmission Project, Kittitas County, Washington* by Raymond DePuydt (1994:46-49). At present, no Determination of Eligibility (DOE) has been submitted for site 45KT835, and this site is unassessed as to NRHP-eligibility.

Table 1 also includes seven additional prehistoric sites that were identified by a cultural resources survey of the proposed pipeline route in Kittitas County by staff from Historical Research Associates, Inc (HRA), and Dames & Moore, and that were listed in the DEIS (1998:Table 3.12.1). All of these resources are situated on WSP&RC land in Gingko Petrified Forest State Park. To date, these sites have not received trinomial numbers (e.g., 45KT---) from the OAHP in Lacey. Available information concerning these sites is listed in **Table 1** under Cross Cascade Pipeline Segment 5, utilizing the temporary numbers assigned by HRA and Dames & Moore, and reported in *Results of A Cultural Resources Assessment for the Olympic Pipe Line Company's Proposed Cross Cascades Petroleum Products Pipeline, Washington*, (1997:5-71-5-79).

A number of historic period cultural resources have been previously recorded in proximity to the John Wayne Pioneer Trail, sites whose locations are also situated near Cross Cascade Pipeline segments reviewed in this summary. The majority of such sites are related to railroad construction, operation, and maintenance for the Milwaukee Road in King and Kittitas counties. Only a few sites, such as 19-28, are unassociated with railway development in the historic period.

One unusually large Milwaukee Road "site" that spans both King and Kittitas was not included in **Table 1**. The site in question is the Chicago, Milwaukee, St. Paul and Pacific Railroad properties reported by HRA and Dames & Moore (1997:5-7-5-11). This large site is composed of 42 isolated artifacts and features that are associated with the Milwaukee Road. As this compilation of properties is scattered along approximately 24 miles of the John Wayne Pioneer Trail, it was not possible to include it as a single site within the format of **Table 1**. Locational information concerning "Site Chicago,

Milwaukee, St. Paul and Pacific Railroad" available to AHS was too incomplete to allow for further description or analysis within this testimony. It is noted that features of the site are in proximity to Cross Cascade Pipeline segments, and it appears that the majority of site features are currently unassessed in terms of management status (national, state, or local register eligibility).

At present, it appears that sites recorded by HRA and Dames & Moore for the proposed pipeline's cultural resources survey have not been submitted to the OAHP for assignment of trinomial designations for prehistoric sites, or for King or Kittitas county numbers, in the case of historic sites. As submittal of site forms for field-identified cultural resources is the standard professional practice for bringing the presence of newly identified cultural resources to the attention of the OAHP, the lack of submitted forms for such sites results in OAHP having no knowledge of these site's physical presence. While submittal of site forms for those field-identified sites may have been outside of HRA and Dames & Moore's project scope of work, the apparent lack of registered trinomial and county numbers affects management recommendations concerning such sites. The OAHP is not in a position to comment upon management recommendations for archaeological and historical resources until such sites have been formally recorded, submitted for OAHP review and numbering, and then added to that office's data base of known cultural properties.

Cultural resources investigations undertaken to date for the Cross Cascade Pipeline serve as a starting point to identifying archaeological and historical resources along the route of the proposed pipeline, but assessments of significance for HRA and Dames & Moore's survey-identified sites have yet to occur. Once trinomials or county numbers have been obtained for the new sites, each cultural resource's potential for NRHP-eligibility needs

to be determined. It is noted that HRA and Dames & Moore recommended archaeological testing to determine eligibility for a number of sites, if the proposed Cross Cascade Pipeline could not avoid such resources.

The potential for identifying presently unrecorded and unknown cultural resource sites in proximity to the John Wayne Pioneer Trail or in Twin Falls State Park and Gingko Petrified Forest State Park is assumed to be variable. To date, no cultural resources investigations have been undertaken in Twin Falls State Park, and only limited studies have been completed within Gingko Petrified Forest State Park. One of the most significant characteristics of Gingko Petrified Forest State Park is its numerous paleontological deposits. Outcrops of petrified wood or related stone tool-grade lithic materials are often associated with prehistoric quarries and/or lithic scatters. The potential for discovering prehistoric sites near such paleontological deposits in the park is considered high.

In terms of the proposed Cross Cascade Pipeline segments near the Iron Horse State Park/John Wayne Pioneer Trail, I consider the potential low for recording new sites east of Kittitas, Washington. Much of the trail in this portion of the county is situated in the US Army's Yakima Training Center (YTC), one of the most extensively studied geographical areas in the Columbia Plateau. I believe the potential for identifying additional sites along the segment of the Iron Horse State Park/John Wayne Pioneer Trail between Kittitas and the Priest Rapids Lake reservoir is low. However, I evaluate the cultural resource site potential as high along the Iron Horse State Park/John Wayne Pioneer Trail west of Ellensburg, Washington. Riverine and lakeside settings, as well as upland areas of dense vegetation, may yet contain prehistoric and historic cultural resources. It is highly likely that unrecorded cultural resource sites are located adjacent to

the Iron Horse State Park/John Wayne Pioneer Trail in this portion of the landscape.

Q. How might proposed Cross Cascade Pipeline activities affect these archaeological and historical resources? Can these resources be ranked as to their potential vulnerability?

A. In the case of diffuse sites such as prehistoric and historic artifact scatters, the greatest danger to these sites is from surface collection of artifacts or destruction of context from trespass by heavy equipment. As most prehistoric sites are assumed to have a subsurface component until proven otherwise by archaeological testing, any ground-disturbing activity at prehistoric site locales should be considered an adverse effect. Pumping station locations, as well as staging and assembly areas to facilitate pipeline construction, should be chosen so as to avoid impacts to known cultural resources. In addition, transport of personnel, construction materials, and machinery should be confined to pre-existing roadways. Construction of temporary access roads could potentially damage previously recorded and/or presently unknown cultural resources.

Affects to physical structures such as railroad bridges will primarily be visual and/or will represent a compromise of their physical integrity by way of the attachment of pipeline structural features to these historic resources. **Table 1** presents the vulnerability ranking to cultural resources that will be potentially affected by proposed Cross Cascade Pipeline activities. Overall evaluation of cultural resources vulnerability rank for each archaeological or historical resource was determined on the basis of each cultural resource site's temporal affiliation, type, and proximity to pipeline segments. A low-medium-high ranking system was utilized to evaluate individual cultural resource vulnerability. Working definitions of the categories employed in this ranking scheme for specific sites can be summarized as follows:

Low: Milwaukee Road railroad station locales where the majority of historic period- structures have been removed, standing railroad buildings that are sufficiently removed from proposed Cross Cascade Pipeline segments, and historic artifact scatters and/or can dumps with no associated structural features.

Medium: Intact railroad structures such as bridges that are situated on the John Wayne Pioneer Trail and appear to be eligible for inclusion in the Washington State Heritage Register but are ineligible to the NRHP, and historic artifact scatters and/or can dumps with associated structural features.

High: Prehistoric sites and intact railroad structures such as bridges and tunnels that are potentially NRHP-eligible, and/or determined eligible to the NRHP, and NRHP-listed cultural resources.

Q. What is the significance of these archaeological and historical resources?

A. The majority of cultural resources to be potentially affected by the Cross Cascade Pipeline have yet to have their cultural significance formally assessed. None of the sites included in **Table 1** are presently listed on the NRHP or determined eligible to the NRHP. It is additionally noted that only a few of these sites have been formally evaluated for NRHP-eligibility. Determinations of Eligibility for Snoqualmie Pass Tunnel and 45KI481 were completed in 1990; however, neither site was considered eligible at that time as documented in a "Determination of Eligibility, National Register of Historic Places Registration Form, Snoqualmie Pass Tunnel" and a "Determination of Eligibility, National Register of Historic Places Registration Form, 45KI481 (Garcia)" by Stan Gough (1990a, 1990b). Recent conversations with personnel at OAHP have revealed that if the Snoqualmie Pass Tunnel were reviewed again, it would very likely meet the criteria for inclusion on the NRHP.

One other Milwaukee Road structure, the Humpback Mountain Snowshed, is problematic in regards to establishing its significance. Two similar structures known as the Keechelus Snowsheds were formally located in nearby Kittitas County prior to their demolition by the WSP&RC. Demolition was predicated upon their deteriorated condition. Both NRHP-eligible properties received extensive Historic American Engineering Record (HAER) documentation in *An Historic American Engineering Record recordation of Two Chicago Milwaukee St. Paul and Pacific Railroad Snowsheds on Lake Keechelus, Kittitas, Washington* by Charles V. Mutschler (1994), prior to their removal. It appears that no DOE or HAER documentation was completed for the Humpback Mountain Snowshed, even though its physical condition was also seriously compromised. At some recent date, the majority of the Humpback Mountain Snowshed was removed, with only a short segment reconstructed to demonstrate its former function and appearance. In its partially rebuilt form, the structure appears to retain little of its historic period significance.

Bridge FF-102 was identified in a bridge inventory related to a thematic NRHP nomination of significant Washington bridges prepared by Lisa Soderberg (1980). Presently, Bridge FF-102 and perhaps other bridges and tunnels along the John Wayne Pioneer Trail appear eligible or potentially eligible to the Washington Heritage Register. In 1991, historic period sites 19-29, 19-31, and 19-32 were not recommended for inclusion in a Multiple Property Listing in the National Register of Historic Places for historic resources related to the Milwaukee Road and reported in a "National Register of Historic Places Multiple Property Documentation Form, Historic Resources of the Milwaukee Right-of-Way, Wanapum to Hyak, Washington, 1909-1980" by Mutschler et al. (1991) or in the draft *Report on the Phase II Testing on Puget Power's Hyak-*

Wanapum Electrical Transmission Project, Kittitas County, Washington (DePuydt 1994). An evaluation of their ineligibility to the NRHP was predicated on their compromised physical condition and/or limited potential for historical archaeology.

Based on the results of archaeological testing, both sites 45KT316 and 45KT836 were recommended for inclusion in the NRHP (DePuydt 1994:6.10). Although this recommendation was not apparently forwarded to OAHP, the assessment of these sites' ability to yield information important to understanding regional prehistory appears valid. The remaining prehistoric sites inventoried in **Table 1** have not been assessed in terms of NRHP eligibility. However, the potential for eligibility is assumed high, unless future archaeological testing proves otherwise and individual site DOEs or NRHP nominations prove negative.

Q. Is there anything that the Olympic Pipe Line Company should be required to do to eliminate or reduce adverse impacts to archaeological and historical resources in the event the pipeline is authorized in Iron Horse State Park/John Wayne Pioneer Trail and Gingko Petrified Forest State Park?

A. Yes, Section 106 of the National Historic Preservation Act (NHPA) of 1966 outlines a four-step review process including: identification and evaluation of historic properties, assessment of effects of the undertaking, consultation to resolve adverse effects, and comment by the Advisory Council. The NHPA also provides for Native American consultation for undertakings that may have an effect on culturally or traditionally significant places or resources. Additionally, sections of the National Environmental Policy Act (NEPA) or the State Environmental Policy Act (SEPA) may apply to cultural resources that are not covered by the NHPA. As previously stated, the only known sites in proximity to pipeline segments that clearly have potential for NRHP eligibility are the Snoqualmie Pass Tunnel, 45KT316, and 45KT836.

The cultural resources identification step included in Section 106 needs to be undertaken in Cross Cascade Pipeline segment routes that may not have been previously surveyed. Following identification efforts, evaluation of any newly identified cultural resources and of those resources previously recorded but not evaluated, also needs to be completed. Cultural resources evaluation should be followed by an assessment of potential Cross Cascade Pipeline effects on cultural resources that have been determined eligible to the NRHP. Finally, formulation of mitigation measures through consultation should be undertaken to reduce the effects of any unavoidable and adverse pipeline impacts. The Advisory Council should be afforded the opportunity to comment on any mitigation proposals concerning significant cultural resources.

A number of mitigation measures should be considered for significant cultural resources that may be adversely impacted by proposed Cross Cascade Pipeline activities, but in general, avoidance is the preferred alternative for preserving and limiting the effect of any undertaking on prehistoric and historic resources. Other usable mitigation measures may include test excavation or data recovery at archaeological sites, HAER and Historic American Building Survey (HABS) recordation, informant interview, and additional archival research. All such mitigation strategies should be developed so as to maximize the preservation of significant cultural resources.

I recommend that the original DOE for Snoqualmie Pass Tunnel be revised and submitted to the OAHP for a re-evaluation of its potential NRHP-eligibility. In addition, DOEs for sites 45KT316 and 45KT836 should also be completed and submitted to OAHP to determine their potential eligibility to the NRHP. If these sites are determined eligible or listed on the NRHP, and the project cannot be constructed to avoid them, then it may be necessary

for a Memorandum of Agreement (MOA) to be entered into by the Olympic Pipe Line Company, WSP&RC, and the OAHP to formalize appropriate mitigation measures. The following mitigation strategies are suggested for these cultural resources: the completion of a HAER recordation of the Snoqualmie Pass Tunnel; avoidance or archaeological data recovery at 45KT316; and avoidance or archaeological data recovery at 45KT836.

DATED this _____ day of February, 1999.

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CHARLES T. LUTTRELL